

**Amendments to Claims / Listing of Claims:**

1. (CURRENTLY AMENDED) In a console processing unit for goods  
5 inventory management coupled via the Internet to at least one fixed detector and at least  
one mobile sensor, a data structure for representing a monitored object, the data structure  
comprising:

an object identifier, such object identifier representing one or more goods in  
production, inventory and shipment;

10 a first object location and a time monitored at such location, provided by a  
detector coupled to the console processing unit; and

a second object location and a time monitored at such location, provided by a  
sensor coupled to the console processing unit;

15 wherein an access means processes the data structure securely using a digital  
certificate, watermark or encryption key, such that the data structure is accessible for  
object-monitoring from only one or more specified network site or processor, the data  
structure being provided automatically using control software for network surveillance in  
response to a user search query, the software comprising a network and data  
communication module, an object and map database, an object movement processing  
20 module, a security management module, an electronic transaction processing module, a  
diagnosis tool, a performance report updater module, and a visual object analyzer module,  
whereby such modules are functionally integrated to enable surveillance-based  
commercial transaction using the data structure.

25 2. (PREVIOUSLY PRESENTED) The data structure of Claim 1 further  
comprising:

a scheduled object location and a time scheduled for such location.

3. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:

a position signal being generated by the detector coupled to the monitored object when such object is moveable within an observable range, a visual signal being generated by the sensor uncoupled to such object in the observable range.

5           4. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the detector comprises an accelerometer.

5. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
a software agent associated with the monitored object accesses a database.

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6. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the object identifier comprises an object name, an object group, an object query,  
an object condition, an object status, an object location, an object time, an object error, or  
an object image, video, or audio broadcast signal.

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7. (PREVIOUSLY PRESENTED) The data structure of Claim 3 wherein:  
the observable range is modifiable according to a rule set.

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8. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the monitored object is monitored temporarily using an extrapolated or last-stored  
positional or visual signal.

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9. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the monitored object is authenticated according to a voice pattern, a finger-print  
pattern, a handwritten signature, or a magnetic or smart-card signal.

10. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the monitored object is provided an electronic file comprising a book, a greeting  
card, a news report, a sports report, a stock report, an artwork, a research database, a

personal list, a recorded or live voice or music transmission, an electronic tool, or a commercial transaction.

11. (CURRENTLY AMENDED) In a console processing unit for goods  
5 inventory management coupled via the Internet to at least one fixed detector and at least one mobile sensor, a method for processing a data structure for representing a monitored object, the method comprising the step of:

transmitting to a processor in a network a data structure comprising an object  
identifier, such object identifier representing one or more goods in production, inventory  
10 and shipment, a first object location and a time monitored at such location, the first object location being provided by a detector coupled to a console processing unit, and a second object location and a time monitored at such location, the second object location being provided by a sensor coupled to the console processing unit; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption  
15 key, such that the data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic  
20 transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module, whereby such one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

25 12. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide corroborative surveillance of the identified goods within an observable range in which the sensor is mobile relative  
30 to the detector.

13. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the sensor comprises a sensor signal port for sensing a low-power or fuel  
condition of the identified goods, thereby enabling the console processing unit to indicate  
5 or warn a down period for using the identified goods.

14. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the detector comprises visual-analyzer means for recognizing adaptively the  
identified goods using a neural network or simulation program, thereby enabling secure  
10 inventory management of the identified goods.

15. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:  
the data structure indicates in-stock availability of the identified goods for  
transacting shipment, and a tax-rate for transaction at the location of the identified goods.  
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16. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:  
the sensor comprises a radio-frequency identification device for locating the  
identified goods, and the detector comprises a camera for observing such identified  
goods, thereby enabling the sensor and the detector to provide corroborative surveillance  
20 of the identified goods within an observable range in which the sensor is mobile relative  
to the detector.

17. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:  
the sensor comprises a sensor signal port for sensing a low-power or fuel  
25 condition of the identified goods, thereby enabling the console processing unit to indicate  
or warn a down period for using the identified goods.

18. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:

the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.

5           19. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:  
the data structure indicates in-stock availability of the identified goods for transacting shipment, and a tax-rate for transaction at the location of the identified goods.

10           20. (NEW) In a network for goods inventory management for coupling at least one fixed detector and at least one mobile sensor, a single-chip integrated circuit for processing a data structure for representing a monitored object, the circuit comprising:  
a processor provided in a wireless target unit for transmitting or receiving in a network a data structure comprising an object identifier, such object identifier representing one or more goods in production, inventory and shipment, a first object  
15 location and a time monitored at such location, the first object location being provided by a detector, and a second object location and a time monitored at such location, the second object location being provided by a sensor; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption key, such that the data structure is accessible for object-monitoring from only one or more specified  
20 network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic transaction processing module, a diagnosis tool, a performance report updater module,  
25 and a visual object analyzer module, whereby one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

21. (NEW) The circuit of Claim 20 wherein:

the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide corroborative surveillance  
5 of the identified goods within an observable range in which the sensor is mobile relative to the detector.

22. (NEW) The circuit of Claim 20 wherein:

the sensor comprises a sensor signal port for sensing a low-power or fuel  
10 condition of the identified goods, thereby enabling indication or warning of a down period for using the identified goods.

23. (NEW) The circuit of Claim 20 wherein:

the detector comprises visual-analyzer means for recognizing adaptively the  
15 identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.